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Water Supply Outlook For Idaho



SOIL CONSERVATION SERVICE
U.S. DEPARTMENT OF AGRICULTURE

Cooperating with

IDAHO SOIL CONSERVATION DISTRICTS
IDAHO DEPARTMENT OF WATER RESOURCES

AS OF
FEB. 1, 1981

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: Snow surveyors making special measurements of the snowpack near Mt. St. Helens Volcano, Washington, April 1980.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno, Nevada 89505
Oregon	1220 S. W. Third Ave., Portland, Oregon 97204
Utah	4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U. S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta T3C 1A6.





Irrigators May Face a Water Shortage This Year

SNOW COURSE MEASUREMENTS MADE ON FEBRUARY 1, 1981, INDICATE THAT LOW FLOWS WILL OCCUR IN MANY STREAMS. STUDY THE ATTACHED WATER SUPPLY FORECAST CAREFULLY FOR STREAM FLOW AND/OR RESERVOIR STORAGE FIGURES THAT CONCERN YOUR AREA. KEEP IN TOUCH WITH YOUR IRRIGATION DISTRICT OR OTHER OFFICIALS FOR ESTIMATES OF THE SUPPLY AVAILABLE TO YOU. YOU MAY FIND YOU'LL NEED TO CHANGE CROPS, REDUCE PLANTED ACREAGE, ADJUST TIMING OF WATER APPLICATION, OR IMPROVE EFFICIENCY OF YOUR WATER DISTRIBUTION SYSTEM.

THESE ARE SOME OF THE EARLY DECISIONS AND PLANS YOU MAY HAVE TO MAKE:

- | | |
|--|--|
| CHANGE CROPS | Plant crops which require less water. |
| REDUCE ACREAGE | Reduce your crop acreage. This will help you make better use of your water as well as reduce the amount of seed and fertilizer you need to buy. Be sure to use cover crops to prevent wind erosion on land you don't irrigate. |
| CONSIDER ENERGY COSTS | Even if you are able to pump supplemental water, you should compare inflated energy costs with anticipated crop earnings. You may be money ahead to reduce acreage or change crops. |
| CHECK IRRIGATION SYSTEM | Check your irrigation systems carefully. Make certain that ditches have no water-wasting weeds or debris to slow delivery, sprinkler heads don't have leaks, pipes have tight connections, and pumps work properly. If new parts or equipment are needed, buy them early. |
| PLANT BEST LAND | Plant only your best land - it makes most efficient use of water. If your soil has been mapped, local Soil Conservation Service (SCS) personnel can guide you. If not, they can still give you general information. |
| TECHNICAL ASSISTANCE? | Maintain close contact with the Soil Conservation Service or your local Conservation District for the latest water supply forecast, and for soil information. SCS has water conservation pamphlets and other information that can help irrigators get by with less water. |
| COST-SHARE OR LOANS? | Maintain close contact with local offices of Agricultural Stabilization and Conservation Service (ASCS) and the Farmers Home Administration (FmHA). If a drought situation develops, funds might be made available for cost-sharing or loans to help you apply special water conservation practices. |
| CROPS, FEED, FERTILIZER, OR MARKETING QUESTIONS? | Contact your local Cooperative Extension Service office for crop selection alternatives, fertilizer recommendations, feed supply conditions, and marketing outlook. |

SCS, ASCS, AND FmHA ARE LISTED IN THE PHONE BOOK UNDER "U.S. GOVERNMENT, AGRICULTURE, DEPARTMENT OF." COOPERATIVE EXTENSION SERVICE IS USUALLY LISTED WITH LOCAL COUNTY OFFICES.

WATER SUPPLY OUTLOOK FOR IDAHO

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D C

|||||
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SOIL CONSERVATION SERVICE
BOISE, IDAHO

In Cooperation with

C. STEPHEN ALLRED

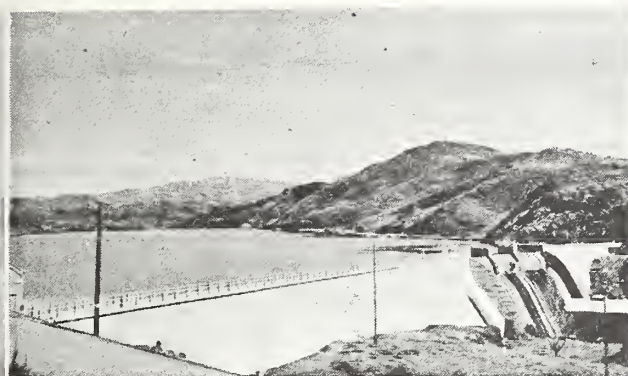
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IDAHO DEPARTMENT OF WATER RESOURCES
|||||

Report prepared by

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WATER SUPPLY OUTLOOK for IDAHO



GENERAL SUMMARY FOR FEBRUARY 1, 1981

The below normal snowpack conditions recorded near the first of the year deteriorated appreciably during January. Measurements near February 1, 1981 indicate a generally well below average snow water accumulation throughout Idaho and the Snake River tributaries in adjacent states. Snow cover as of February 1 varies from a low of near 30 percent of normal on the Raft River and Montpelier Creek watersheds to a high of near 80 percent of average on the Big Lost and Little Wood drainages.

In general, the snowpack in the Great Basin drainage in southeastern Idaho and the watersheds south of the Snake River are 35-40 percent of average. Northern Idaho watersheds from the Clearwater River north are also 35-40 percent of normal. The upper Snake River and tributary watersheds above American Falls are 55 to 65 percent of average except for the Blackfoot at 40 percent of normal. The Boise, Payette, Weiser and Salmon River watersheds are in the 55-60 percent of normal range, while the Wood and Lost River drainages are in the best condition in the State at 70-80 percent of average.

Valley precipitation was below average for January across Idaho while the temperature was slightly warmer than normal. Precipitation was far below normal in some areas such as Salmon with 15 percent and Porthill with 38 percent. Boise was the highest with 86 percent. Precipitation since October 1 has been about 80 percent of normal. While 80 percent is not real bad the biggest problem is that much of

this 80 percent came in late December in the form of rain and depleted much of the snowpack. The freezing level lowered during January allowing much of the precipitation to fall in the form of snow.

Reservoir storage is good to excellent. A combination of 16 irrigation reservoirs in the Snake River Basin shows storage at 112 percent of normal as of February 1.

Forecasts of seasonal runoff for 1981 are below to well below average. Irrigation water supplies are expected to be adequate for areas which have reservoir facilities but shortages can be experienced on drainages with no stored water.

VALLEY PRECIPITATION 1/

Division Averages and Departures

In Inches

DRAINAGE DIVISIONS	Winter January 1981		Fall - Winter Oct. 1980 - Jan. 1981	
	Observed	Departure <u>2/</u>	Observed	Departure <u>2/</u>
Kootenai, Canada & U.S.	1.45	- 2.03	11.47	- .33
Flathead	0.90	- 1.95	7.56	- 1.65
Clark Fork	0.29	- 1.90	5.01	- 1.79
Pend Oreille-Spokane	1.11	- 3.31	11.30	- 3.24
Upper Snake	1.33	- 1.30	5.47	- 2.67
Snow River Plain	0.73	- 0.50	3.03	- 1.03
Salmon-Payette-Boise	1.40	- 1.90	8.36	- 1.29
Clearwater	1.52	- 3.22	10.42	- 4.46
Owyhee-Malheur	0.96	- 0.52	3.53	- 1.18

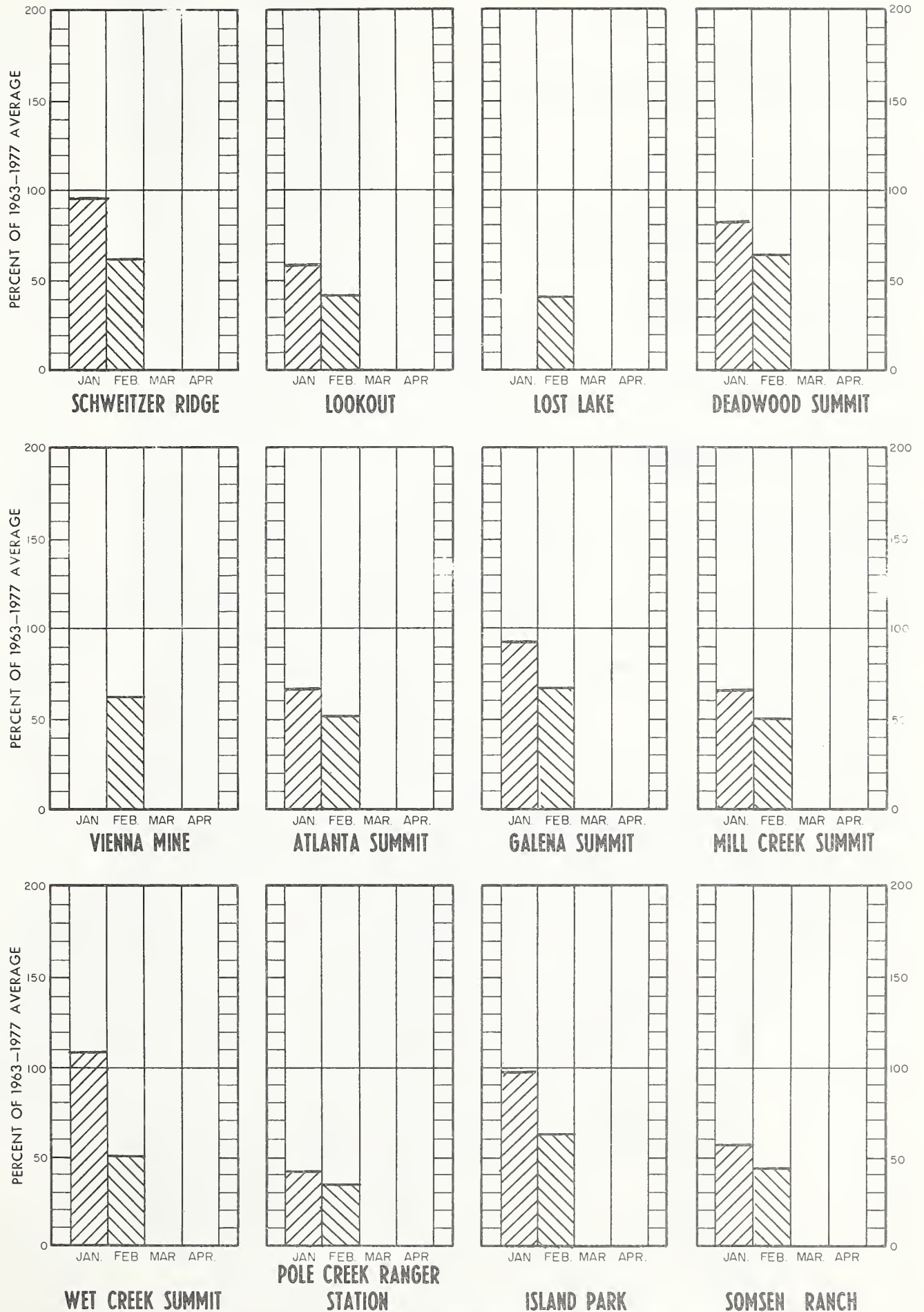
1/ Preliminary analysis and data by the National Weather Service and Meteorological Service of Canada.

2/ Departure from 15-year (1963-1977) drainage division average.

SNOW WATER DEPTHS ACCUMULATION For Selected Snow Courses

As Compared To 1963 - 1977 15 Year Average

FEBRUARY 1, 1981



COMPARISON of SNOW COVER

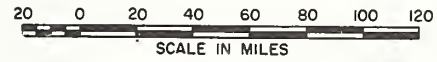
RIVER BASIN WATERSHED	NO.OF COURSES AVERAGED	THIS YEARS SNOW WATER EXPRESSED AS PERCENT OF :	
		LAST YEAR	1963-77 AVERAGE
<u>UPPER COLUMBIA RIVER BASIN</u>			
Kootenai River	23	90	79
Pend Oreille River	70	73	54
Clark Fork River	34	69	46
Flathead River	20	84	63
Priest River	3 - 4	48	53
Spokane River	6	50	39
<u>LOWER SNAKE RIVER BASIN</u>			
Clearwater River	12 - 14	52	37
Salmon River	13	66	60
<u>MIDDLE SNAKE RIVER BASIN - Northside</u>			
Little Lost River	2 - 5	61	52
Big Lost River	4	82	82
Little Wood River	4	72	76
Big Wood River	10	68	69
Boise River	13 - 14	54	54
Canyon Creek	2	-	60
Payette River	12	63	58
Weiser River	1	-	56
<u>MIDDLE SNAKE RIVER BASIN - Southside</u>			
Raft River	1	30	29
Goose-Trapper Creek	3	39	41
Salmon Falls Creek	4	39	42
Bruneau River	4	37	38
Owyhee River	6	43	44
Jordan Creek	1	37	40
<u>UPPER SNAKE RIVER BASIN</u>			
Snake Basin - Above Palisades Reservoir	32	62	52
Camas-Beaver Creeks	2	106	64
Henrys Fork River	7	73	59
Teton River	8	71	59
Willow Creek	5 - 9	55	53
Blackfoot River	3	34	40
Portneuf River	4	41	48
<u>GREAT BASIN</u>			
Bear River - Upper	5	36	42
Bear River - Lower	13	32	35
Montpelier Creek	6	28	30
Mink Creek	2	45	43
Cub River	3	33	34

SNOW WATER DEPTHS

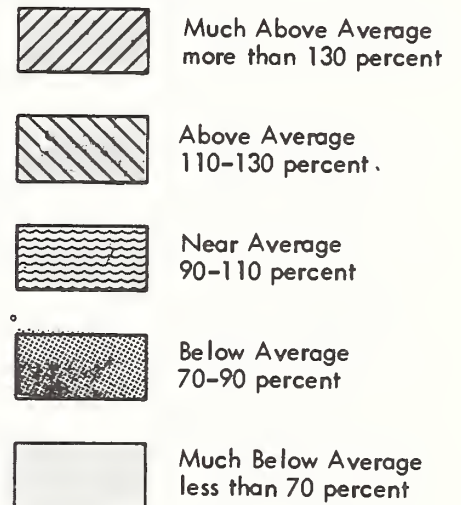
As percent of 1963-77 15 year average

FEBRUARY 1, 1981

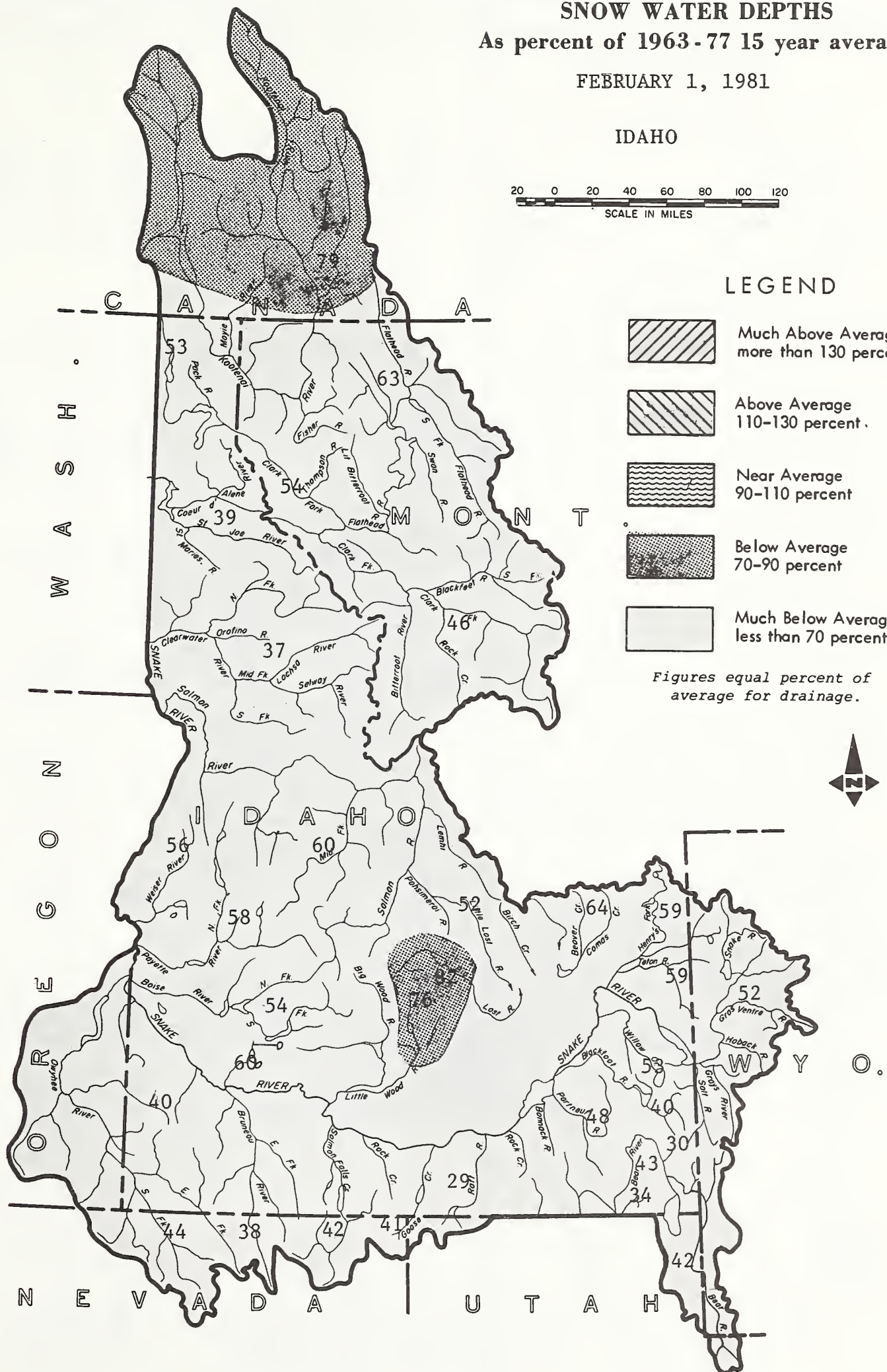
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LEGEND



Figures equal percent of average for drainage.



RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE CAPACITY	MEASURED (First of Month)		
		THIS YEAR	LAST YEAR	1963-77 AVERAGE
UPPER COLUMBIA BASIN				
Clark Fork - Pend Oreille				
Hungry Horse	3428.0	2829.0	2390.0	2341.0
Flathead	1791.0	1185.0	791.0	1253.3
Pend Oreille	1155.1	894.9	148.9	320.9
Noxon	334.6	318.6	292.3	315.2
Spokane				
Coeur d'Alene	225.1	180.0	54.9	145.3
SNAKE BASIN				
Snake				
Jackson Lake	624.4	552.5	532.6	612.5
Palisades	1200.0	1052.5	847.7	907.8
American Falls	1673.0	1302.0	1041.3	1151.2
Island Park	127.0	114.5	87.2	105.0
Grassy Lake	15.2	12.2	11.2	10.4
Brownlee	980.2	787.6	581.6	674.4
Goose-Trapper Creeks				
Oakley	74.4	26.8	31.3	26.4
Salmon Falls Creek				
Salmon Falls	182.6	52.9	39.7	51.6
Big Lost				
Mackay	44.2	40.6	22.7	30.3
Big Wood				
Magic	191.5	111.0	18.7	103.6
Little Wood				
Little Wood	30.0	21.0	12.6	16.1
Fish Creek				
Carey Valley	14.4	6.3	2.0	--
Boise				
Anderson Ranch	423.2	287.9	209.9	279.0
Arrowrock	286.6	215.5	220.2	254.3
Lucky Peak	278.2	223.5	31.9	85.9
Lake Lowell (Deer Flat)	169.0	120.9	86.5	122.1
Owyhee				
Owyhee	715.0	525.3	540.6	462.5
Payette				
Cascade	653.2	477.0	247.9	370.8
Deadwood	161.9	108.5	55.1	80.6
Weiser				
Mann Creek	11.1	5.9	3.5	--
Clearwater				
Dworshak	2016.0	1273.0	758.9	--
GREAT BASIN				
Bear				
Bear Lake	1421.0	1047.3	973.4	1026.4

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST ^c		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ⁺

UPPER COLUMBIA BASIN

KOOTENAI RIVER

Leonia	(at)	7280	82	Apr-Sep	--	8858
		6340	82	Apr-Jul	--	7708
		5040	82	Apr-Jun	--	6114

PEND OREILLE RIVER

Clark Fork River

Whitehorse Rapids	(at)	9740	71	Apr-Sep	--	13781
		8850	71	Apr-Jul	--	12519
		7500	71	Apr-Jun	--	10633

Priest River

Priest River <u>1</u> /	(at)	720	80	Apr-Sep	--	895
		673	80	Apr-Jul	--	841

SPOKANE RIVER

Post Falls <u>2</u> /	(at)	1500	52	Apr-Sep	--	2910
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St. Joe River

Calder	(at)	680	52	Apr-Sep	--	1309
		650	53	Apr-Jul	--	1238

SNAKE RIVER BASIN

SNAKE RIVER - MAIN STEM

Moran <u>3</u> /	(at)	655	72	Apr-Sep	--	903
Palisades Inflow <u>3</u> /		2825	73	Apr-Sep	--	3863
Heise <u>4</u> /	(nr)	3100	73	Apr-Sep	--	4247
Blackfoot <u>5</u> /	(nr)	3390	74	Apr-Jul	--	4579

Henrys Fork

Ashton <u>6</u> /	(nr)	550	75	Apr-Sep	--	737
Rexburg <u>7</u> /	(nr)	1150	75	Apr-Sep	--	1534

Portneuf River

Topaz	(at)	68	63	Mar-Sep	--	108
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Oakley Reservoir Inflow

13	36	Mar-Sep	--	36
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Salmon Falls Creek

San Jacinto	(nr)	40	42	Mar-Sep	--	95
		38	42	Mar-Jul	--	90
		36	42	Mar-Jun	--	85

Bruneau River

Hot Springs	(nr)	105	42	Mar-Sep	--	251
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(c) Assuming normal meteorological conditions.

+ 1963-1977 period.

STREAMFLOW FORECASTS

STREAMFLOW FORECASTS		THIS YEAR			PAST RECORD	
BASIN, STREAM and/or FORECAST POINT		FORECAST ^c		FORECAST PERIOD	THOUSAND ACRE FEET	
		Thousand Acre Feet	Percent of Average		Last Year	Average ⁺
<u>Little Lost River</u>						
Howe	(nr)	27	60	Apr-Sep	--	45
Wet Creek	(bl)	16	62	Apr-Jun	--	26
		25	61	Apr-Sep	--	41
<u>Big Lost River</u>						
Howell Ranch	(at)	195	87	Apr-Sep	--	225
		135	88	Apr-Jun	--	154
Mackay <u>8/</u>	(nr)	175	86	Apr-Sep	--	204
<u>Big Wood River</u>						
Magic Reservoir		220	69	Apr-Sep	--	319
Inflow <u>9/</u>		210	69	Apr-Jul	--	303
		230	69	Mar-Jul	--	332
<u>Little Wood River</u>						
Carey	(nr)	77	72	Apr-Sep	--	107
		71	72	Apr-Jul	--	99
		62	72	Apr-Jun	--	87
<u>Boise River</u>						
Twin Springs	(nr)	530	72	Apr-Sep	--	733
		485	72	Apr-Jul	--	676
Boise <u>10/</u>	(nr)	1140	69	Apr-Sep	--	1656
		940	69	Apr-Jun	--	1360
		1060	69	Apr-Jul	--	1536
<u>South Fork</u>						
Anderson Dam <u>11/</u>	(at)	440	71	Apr-Sep	--	622
<u>Owyhee River</u>						
Gold Cr., Nev. <u>12/</u>	(nr)	12	52	Apr-Jul	--	23
Owyhee, Nev. <u>12/</u>	(nr)	40	50	Apr-Jul	--	80
Lake Owyhee		235	60	Apr-Sep	387	392
Net inflow <u>13/</u>		336	58	Feb-Jul	521	578
<u>Payette River</u>						
Horseshoe Bend <u>14/</u>	(nr)	1330	72	Apr-Sep	--	1860
<u>North Fork</u>						
Cascade <u>15/</u>	(at)	407	72	Apr-Sep	--	564
Banks <u>15/</u>	(nr)	520	72	Apr-Sep	--	726
<u>Weiser River</u>						
Weiser	(nr)	355	64	Mar-Sep	--	558

(c) Assuming normal meteorological conditions.

- 1963-1977 period.

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST ^c		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average [†]

Salmon River

Whitebird (at) 5755 80 Apr-Sep -- 7196

Clearwater River

Spalding (at) 5900 68 Apr-Sep -- 8672

GREAT BASINBEAR RIVER

Harer (at) 186 56 Apr-Sep -- 332

Montpelier Creek

Montpeleir (nr) 5.6 45 Apr-Sep -- 12.4

Cub River

Preston (nr) 24 48 Apr-Sep -- 50
22.5 48 Apr-Jul -- 47

- 1/ Observed flow corrected for storage in Priest Lake.
- 2/ Observed flow corrected for storage in Coeur d'Alene Lake.
- 3/ Corrected for storage in Jackson Lake.
- 4/ Corrected for storage in Jackson Lake and Palisades.
- 5/ Corrected for storage in Jackson Lake, Palisades, Island Park, Henry's Lake, Grassy Lake and diversions between Heise and Blackfoot.
- 6/ Corrected for storage in Henry's Lake and Island Park Reservoir.
- 7/ Corrected for storage in Henry's Lake, Island Park, Grassy Lake and diversions between Ashton and Rexburg.
- 8/ Observed flow corrected for storage in Mackay Reservoir.
- 9/ Combined flow Big Wood River nr. Bellevue and Camas Creek nr. Blaine.
- 10/ Corrected for storage in Arrowrock, Anderson Ranch and Lucky Peak.
- 11/ Corrected for storage in Anderson Ranch Reservoir.
- 12/ Corrected for storage in Wildhorse Reservoir.
- 13/ From WPRS records of inflow.
- 14/ Corrected for storage in Cascade and Deadwood Reservoirs.
- 15/ Corrected for storage in Cascade Reservoir.

Cooperative forecasts released by Soil Conservation Service and National Weather Service.

SNOW

DRAINAGE BASIN and or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
					Last Year	Average
NAME	Elevation					
Above Burke	4100	1/30	16	4.8	10.4	16.4*
Aspen Grove	6500	1/28	23	5.2	11.0	8.4*
Atlanta Summit	7600	2/2	46	13.0	24.4	25.2
Atlanta Townsite	5280	1/29	16	4.9	--	--
Austin Brothers Ranch	6400	1/27	13	2.3	8.6	6.4
Bad Bear	4940	1/30	21	5.0	11.1	11.0
Banner Summit	7040	1/29	50	13.4	--	--
Battle Creek (A)	5710	2/2	T	T	--	2.8
Bear Basin	5350	1/29	38	9.0	11.5	--
Bear Canyon	7900	2/2	40	10.8	13.3	13.0*
Bear Creek (A)	8040	2/3	25	5.3	14.0	13.6
Beaverdam Creek	6120	1/31	20	2.8	--	--
Bennett Mountain	6560	2/1	27	6.6	--	12.5*
Benton Meadow	2370	1/30	0	0.0	3.9	5.5
Benton Spring	4920	1/30	16	5.5	10.9	13.9
Big Creek Summit	6580	1/30	54	15.5	27.4	26.3
Big Springs	6400	1/30	34	8.0	10.3	14.7
Birch Creek	6800	1/28	16	3.4	6.8	7.4*
Blue Ridge	6780	1/29	29	6.5	12.8	--
Bogus Basin	6340	2/3	29	8.0	15.8	17.6
Bogus Basin Road	5540	2/3	9	1.6	4.3	6.0
Bone	6200	1/29	12	2.5	5.1	6.0*
Boulder Creek	5440	1/30	38	10.1	11.1	18.0
Breezy Saddle	5010	1/28	28	7.2	13.3	--
Brockman Station	6430	1/29	19	3.9	7.2	--
Brundage Mountain	7560	1/29	64	17.0	29.5	32.2*
Bull Basin (A)	5480	2/2	3	0.4	--	1.3
Camp Creek	6580	1/29	21	5.0	4.0	8.3
Cayuse Airstrip	3500	1/28	7	1.0	3.5	9.7*
Copper Basin	7640	2/2	21	5.9	6.0	6.8
Couch Summit	6840	2/1	43	10.5	15.1	13.7*
Cozy Cove	5380	1/29	33	7.2	11.6	13.2*
Crater Meadows	5960	1/28	40	10.4	21.6	31.0*
Crawford Ranger Station	4860	1/31	14	3.4	6.5	6.7
Crooked Fork	3610	1/29	9	2.4	6.1	10.4*
Cub River Ranger Station	5450	1/26	12	2.8	6.2	6.4
Darby Canyon	8250	1/27	38	7.0	14.0	15.4*
Deadline	6900	1/30	31	7.3	18.0	15.7
Deadwood Airstrip	5360	1/29	33	7.9	11.8	11.7
Deadwood Summit	6860	1/29	75	22.4	32.6	34.8*
Dempsey Creek	6100	2/2	24	4.6	10.2	8.3
Dollarhide Summit	8420	2/2	42	11.2	19.1	18.3*
East Creek	7000	1/31	24	3.6	--	--
Elk Butte	5550	1/28	32	7.7	--	--
Emigrant Summit	7390	2/2	39	7.1	16.6	17.0
Emigration Canyon	6500	2/2	21	3.8	9.2	7.5
Fairview Guard Station	6750	2/2	11	2.0	--	3.7
Fish Lake Airstrip	5650	1/28	35	9.4	21.0	28.8*
Forty-nine Meadows	4830	1/28	26	6.4	12.3	--
Fourth of July Summit	3200	1/29	3	0.2	4.2	7.2
Franklin Basin	8040	1/26	20	5.2	18.1	17.8*
Freds Mountain	8150	2/2	45	9.9	13.0	13.9*
Galena	7440	1/28	42	10.2	11.9	14.8
Galena Summit	8780	1/28	44	11.8	15.3	17.5
Garfield Ranger Station	6560	1/30	30	6.4	8.5	8.0*
Gibbons Pass	7100	2/1	37	11.2	12.4	16.7
Giveout	6860	1/28	18	2.7	9.6	8.5
Goat Creek	8880	1/28	21	4.0	12.3	11.8
Graham Guard Station	5690	1/29	26	5.4	10.9	--
Graham Ranch	6270	1/28	37	8.4	10.1	10.5
Grassy Lake	7265	1/28	58	13.6	16.3	24.8
(Hell Creek) Lava Creek	7350	1/28	27	5.9	9.3	--
Hemlock Butte	5810	1/28	41	10.9	22.7	35.1*
Hilts Creek	8000	1/29	22	5.4	8.4	--
Hoodoo Basin	6000	2/1	57	20.4	30.0	36.3*
Hoodoo Creek	5900	2/1	47	16.6	23.7	32.5*
Howell Canyon	7980	1/28	21	5.4	17.8	18.6
Hyndman Creek	7440	2/2	38	9.3	--	--
Island Park	6290	1/30	33	7.6	9.0	12.0
Jackpine Creek	7350	1/27	32	6.2	11.3	14.9*
Jackson Peak	7070	1/29	46	13.5	22.4	24.1*
Johnson Creek	6730	1/27	20	4.1	--	--
Kilgore	6320	1/28	25	5.8	6.2	8.6

(b) 1963-1977, 15 year period. * Estimated 1963-77 15 Year Average.

(A) Aerial observation Water content estimated.

SNOW

DRAINAGE BASIN and or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
					Last Year	Average
NAME	Elevation					
Lake Fork	5290	2/1	26	6.5	9.0	11.2*
Little Beaver	6970	1/28	15	2.3	10.7	10.6
Little Camas Flat	4940	2/1	14	4.0	--	5.2*
Lolo Pass	5240	1/29	27	7.7	17.4	21.8*
Lookout	5140	1/30	32	10.8	20.0	25.4
Lost Garfield	6600	2/2	10	1.7	--	3.1
Lost Lake	6110	1/28	56	16.3	25.8	39.4
Lost Wood Divide	7900	2/2	43	12.1	16.5	17.0*
Lower Home Canyon	7640	1/29	17	3.1	10.9	10.1*
Lower Pebble	5780	2/1	18	3.1	11.2	9.2*
Magic Mountain	6880	1/30	29	6.8	14.6	12.8
Mascot Mine	7780	2/2	33	8.2	11.5	9.8*
McRenolds Reservoir	6720	1/27	34	6.5	9.9	13.0*
Mill Creek Summit	8800	1/28	32	8.6	17.0	17.1
Mink Creek	6410	2/1	36	7.0	12.3	12.4*
Montpelier Creek	6540	1/28	10	1.9	6.6	5.8
Moonshine	7440	2/2	20	4.2	--	7.9*
Moore's Creek Summit	6100	1/30	45	12.5	22.8	23.7
Moose Creek	6200	1/30	26	6.6	7.4	12.6
Morgan Creek	7600	1/28	20	4.5	8.6	10.3
Mosquito Ridge	5200	1/30	47	15.2	--	24.5*
Mount Baldy	8920	1/30	49	11.3	15.6	15.2*
Mud Creek	7100	1/29	41	9.0	13.7	--
Muldoon	6320	1/30	24	4.5	7.1	6.2*
Packsaddle Spring	8200	1/27	37	9.0	--	--
Pebble Creek	6550	2/1	24	5.2	14.5	11.2
Phillips Bench	8200	1/29	41	15.3	15.8	17.8*
Pierce Ranger Station	3080	1/30	4	0.7	7.6	8.6
Pine Creek Pass	6810	2/2	32	6.8	8.6	12.0
Pole Creek Ranger Station	8360	1/29	24	5.0	14.0	14.4
Prairie	4800	1/29	3	0.6	4.6	5.5
Rammell Mountain	8240	1/27	54	11.7	--	--
Red Canyon (A)	6520	2/2	6	1.2	--	5.8
Rock Flat Summit	5310	1/29	35	7.8	9.4	13.3
Savage Pass	6170	1/29	31	10.0	16.2	19.1*
Sawmill Canyon	7000	2/2	18	3.0	--	6.0*
Sawtell Mountain	8720	1/29	54	15.1	22.7	22.8*
Schweitzer Bowl	4800	Plowed out			18.5	21.8*
Schweitzer Ridge	6200	1/27	49	20.1	38.4	32.6*
Secesh Summit	6520	2/1	50	16.4	24.2	26.3*
Seventy-six Creek	7100	2/3	18	3.8	8.8	7.8
Shanghai Summit	4570	1/28	12	1.4	10.4	17.4*
Sheep Mountain	6570	1/29	23	4.7	8.7	9.8*
Sherwin	3200	1/30	4	0.7	5.9	10.7
Slug Creek Divide	7230	1/29	21	4.3	13.2	11.5
Soldier Ranger Station	5740	2/1	24	6.1	10.8	9.8
Somsen Ranch	6840	1/27	23	4.4	11.0	10.1
South Mountain	6500	1/31	17	4.0	10.8	9.9
Squaw Flat	6240	1/31	42	10.6	--	--
Squaw Meadow	5900	2/1	50	16.9	25.5	25.8*
State Line	6660	2/2	30	6.5	8.8	10.0
Stickney Mill	7430	2/2	26	6.3	7.2	6.0*
Strawberry Creek	5820	2/2	21	3.4	6.7	7.4
Succor Creek	6200	2/2	14	2.8	--	3.8
Sulphur Peak	7070	1/27	19	4.0	--	--
Sunset	5540	1/29	33	8.9	--	--
Swede Peak	7640	1/30	41	8.5	13.1	12.6
Targhee Pass	6980	1/29	22	4.9	6.3	10.5*
Teton Pass W.S.	7740	1/29	39	8.8	12.4	16.8*
Tex Creek	6650	1/28	20	4.3	7.7	6.5*
Trinity Mountain	7770	2/2	54	16.0	30.6	31.1
Upper Home Canyon	8560	1/29	25	5.2	17.7	16.3*
Valley View	6680	1/29	25	5.6	8.6	12.5
Vaught Ranch (A)	5830	2/2	T	T	--	3.2*
Vienna Mine	8960	2/2	56	16.2	29.8	26.1*
War Eagle (A)	7280	2/2	35	8.8	--	16.3*
West Branch	5560	1/30	43	11.6	--	--
Wet Creek Summit	7680	1/29	21	4.4	7.6	8.7*
Whiskey Flat	6960	1/28	9	2.3	7.9	6.5
White Elephant	7710	1/29	42	10.5	16.8	13.2*
Willow Flat	6070	1/26	14	3.8	11.6	10.9
Wood Canyon Divide	7450	1/27	18	3.9	--	--

(b) 1963-1977, 15 year period. * Estimated 1963-77 15 Year Average.

(A) Aerial observation Water content estimated.

GOVERNMENT AGENCIES

States:

Idaho Department of Water Resources
State of Idaho Department of Fish and Game
University of Idaho
Idaho State University
Montana Agricultural Experiment Station
Montana State Water Conservation Board
Montana Cooperative Snow Surveys
Nevada Cooperative Snow Surveys
Oregon Agricultural Experiment Station
Oregon Cooperative Snow Surveys
Oregon State Engineer and Corps of
State Watermasters
Utah Cooperative Snow Surveys
Wyoming Cooperative Snow Surveys

Federal:

U. S. Army Engineers

U. S. Department of Agriculture
Forest Service
ESCS Crop Reporting Service
SEA Agricultural Research

U. S. Department of Commerce
NOAA, National Weather Service

U. S. Department of the Interior
Bonneville Power Administration
Water and Power Resources Service
Fish and Wildlife Service
Water Resources Division, Geological Survey
National Park Service
Bureau of Land Management

PUBLIC UTILITIES

Washington Water Power Company
Idaho Power Company

ORGANIZED PUBLIC AGENCIES

Big Lost River Irrigation District
Blaine Soil Conservation District
Boise Project Board of Control
Idaho Water District #01
Little Wood River Irrigation District
Mann Creek Irrigation District
Salmon Falls Creek Irrigation Company
Twin Falls Soil Conservation District
Big Wood Irrigation Company
Owyhee Project - North & South Board of Control
Valley Soil Conservation District
Portneuf Soil and Water Conservation District
East Cassia Soil and Water Conservation District
West Cassia Soil and Water Conservation District
Camas Soil and Water Conservation District

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